

Learning Disabilities and Disorders

Types of Learning Disorders and Their Signs

What are learning disabilities?

Learning disabilities, or learning disorders, are an umbrella term for a wide variety of learning problems. A learning disability is not a problem with intelligence or motivation. Kids with learning disabilities aren't lazy or dumb. In fact, most are just as smart as everyone else. Their brains are simply wired differently. This difference affects how they receive and process information.

Simply put, children and adults with learning disabilities see, hear, and understand things differently. This can lead to trouble with learning new information and skills, and putting them to use. The most common types of learning disabilities involve problems with reading, writing, math, reasoning, listening, and speaking.

Children with learning disabilities can, and do, succeed

It can be tough to face the possibility that your child has a learning disorder. No parents want to see their children suffer. You may wonder what it could mean for your child's future, or worry about how your kid will make it through school. Perhaps you're concerned that by calling attention to your child's learning problems he or she might be labeled "slow" or assigned to a less challenging class.

But the important thing to remember is that most kids with learning disabilities are just as smart as everyone else. They just need to be taught in ways that are tailored to their unique learning styles. By learning more about learning disabilities in general, and your child's learning difficulties in particular, you can help pave the way for success at school and beyond.

Signs and symptoms of learning disabilities and disorders

If you're worried, don't wait

If you suspect that your child's learning difficulties may require special assistance, please do not delay in finding support. The sooner you move forward, the better your child's chances for reaching his or her full potential.

Learning disabilities look very different from one child to another. One child may struggle with reading and spelling, while another loves books but can't understand math. Still another child may have difficulty understanding what others are saying or communicating out loud. The problems are very different, but they are all learning disorders.

It's not always easy to identify learning disabilities. Because of the wide variations, there is no single symptom or profile that you can look to as proof of a problem. However, some warning signs are more common than others at different ages. If you're aware of what they are, you'll be able to catch a learning disorder early and quickly take steps to get your child help.

The following checklist lists some common red flags for learning disorders. Remember that children who don't have learning disabilities may still experience some of these difficulties at various times. The time for concern is when there is a consistent unevenness in your child's ability to master certain skills.

Preschool signs and symptoms of learning disabilities

- Problems pronouncing words
- Trouble finding the right word
- Difficulty rhyming
- Trouble learning the alphabet, numbers, colors, shapes, days of the week
- Difficulty following directions or learning routines
- Difficulty controlling crayons, pencils, and scissors or coloring within the lines
- Trouble with buttons, zippers, snaps, learning to tie shoes

Ages 5-9 signs and symptoms of learning disabilities

- Trouble learning the connection between letters and sounds
- Unable to blend sounds to make words
- Confuses basic words when reading
- Consistently misspells words and makes frequent reading errors
- Trouble learning basic math concepts
- Difficulty telling time and remembering sequences
- Slow to learn new skills

Ages 10-13 signs and symptoms of learning disabilities

- Difficulty with reading comprehension or math skills
- Trouble with open-ended test questions and word problems
- Dislikes reading and writing; avoids reading aloud
- Spells the same word differently in a single document
- Poor organizational skills (bedroom, homework, desk is messy and disorganized)
- Trouble following classroom discussions and expressing thoughts aloud
- Poor handwriting

Paying attention to developmental milestones can help you identify learning disorders

Paying attention to normal developmental milestones for toddlers and preschoolers is very important. Early detection of developmental differences may be an early signal of a learning disability and problems that are spotted early can be easier to correct.

A developmental lag might not be considered a symptom of a learning disability until your child is older, but if you recognize it when your child is young, you can intervene early. You know your child better than anyone else does, so if you think there is a problem, it doesn't hurt to get an evaluation. You can also ask your pediatrician for a developmental milestones chart.

Problems with reading, writing, and math

Learning disabilities are often grouped by school-area skill set. If your child is in school, the types of learning disorders that are most conspicuous usually revolve around reading, writing, or math.

Learning disabilities in reading (dyslexia)

There are two types of learning disabilities in reading. Basic reading problems occur when there is difficulty understanding the relationship between sounds, letters and words. Reading comprehension problems occur when there is an inability to grasp the meaning of words, phrases, and paragraphs.

Signs of reading difficulty include problems with:

- letter and word recognition
- understanding words and ideas
- reading speed and fluency
- general vocabulary skills

Learning disabilities in math (dyscalculia)

Learning disabilities in math vary greatly depending on the child's other strengths and weaknesses. A child's ability to do math will be affected differently by a language learning disability, or a visual disorder or a difficulty with sequencing, memory or organization.

A child with a math-based learning disorder may struggle with memorization and organization of numbers, operation signs, and number "facts" (like $5+5=10$ or $5\times 5=25$). Children with math learning disorders might also have trouble with counting principles (such as counting by 2s or counting by 5s) or have difficulty telling time.

Learning disabilities in writing (dysgraphia)

Learning disabilities in writing can involve the physical act of writing or the mental activity of comprehending and synthesizing information. Basic writing disorder refers to physical difficulty forming words and letters. Expressive writing disability indicates a struggle to organize thoughts on paper.

Symptoms of a written language learning disability revolve around the act of writing. They include problems with:

- neatness and consistency of writing
- accurately copying letters and words
- spelling consistency
- writing organization and coherence

Other types of learning disabilities and disorders

Reading, writing, and math aren't the only skills impacted by learning disorders. Other types of learning disabilities involve difficulties with motor skills (movement and coordination), understanding spoken language, distinguishing between sounds, and interpreting visual information.

Learning disabilities in motor skills (dyspraxia)

Motor difficulty refers to problems with movement and coordination whether it is with fine motor skills (cutting, writing) or gross motor skills (running, jumping). A motor disability is sometimes referred to as an “output” activity meaning that it relates to the output of information from the brain. In order to run, jump, write or cut something, the brain must be able to communicate with the necessary limbs to complete the action.

Signs that your child might have a motor coordination disability include problems with physical abilities that require hand-eye coordination, like holding a pencil or buttoning a shirt.

Learning disabilities in language (aphasia/dysphasia)

Language and communication learning disabilities involve the ability to understand or produce spoken language. Language is also considered an output activity because it requires organizing thoughts in the brain and calling upon the right words to verbally explain something or communicate with someone else.

Signs of a language-based learning disorder involve problems with verbal language skills, such as the ability to retell a story and the fluency of speech, as well as the ability to understand the meaning of words, parts of speech, directions, etc.

Auditory and visual processing problems: the importance of the ears and eyes

The eyes and the ears are the primary means of delivering information to the brain, a process sometimes called “input.” If either the eyes or the ears aren't working properly, learning can suffer.

- **Auditory processing disorder** – Professionals may refer to the ability to hear well as “auditory processing skills” or “receptive language.” The ability to hear things correctly greatly impacts the ability to read, write and spell. An inability to distinguish subtle differences in sound, or hearing sounds at the wrong speed make it difficult to sound out words and understand the basic concepts of reading and writing.
- **Visual processing disorder** – Problems in visual perception include missing subtle differences in shapes, reversing letters or numbers, skipping words, skipping lines, misperceiving depth or distance, or having problems with eye–hand coordination. Professionals may refer to the work of the eyes as “visual processing.” Visual perception can affect gross and fine motor skills, reading comprehension, and math.

Common Types of Learning Disabilities

Dyslexia – Difficulty reading

- Problems reading, writing, spelling, speaking

Dyscalculia – Difficulty with math

- Problems doing math problems, understanding time, using money

Dysgraphia – Difficulty with writing

- Problems with handwriting, spelling, organizing ideas

Dyspraxia (Sensory Integration Disorder) – Difficulty with fine motor skills

- Problems with hand-eye coordination, balance, manual dexterity

Dysphasia/Aphasia – Difficulty with language

- Problems understanding spoken language, poor reading comprehension

Auditory Processing Disorder – Difficulty hearing differences between sounds

- Problems with reading, comprehension, language

Visual Processing Disorder – Difficulty interpreting visual information

- Problems with reading, math, maps, charts, symbols, pictures

Dyslexia	Difficulty reading	Problems reading, writing, spelling, speaking
Dyscalculia	Difficulty with math	Problems doing math problems, understanding time, using money
Dysgraphia	Difficulty with writing	Problems with handwriting, spelling, organizing ideas
Dyspraxia (Sensory Integration Disorder)	Difficulty with fine motor skills	Problems with hand–eye coordination, balance, manual dexterity
Dysphasia/Aphasia	Difficulty with language	Problems understanding

		spoken language, poor reading comprehension
Auditory Processing Disorder	Difficulty hearing differences between sounds	Problems with reading, comprehension, language
Visual Processing Disorder	Difficulty interpreting visual information	Problems with reading, math, maps, charts, symbols, pictures

Other disorders that make learning difficult

Difficulty in school doesn't always stem from a learning disability. Anxiety, depression, stressful events, emotional trauma, and other conditions affecting concentration make learning more of a challenge. In addition, ADHD and autism sometimes co-occur or are confused with learning disabilities.

- **ADHD** – [Attention deficit hyperactivity disorder \(ADHD\)](#), while not considered a learning disability, can certainly disrupt learning. Children with ADHD often have problems sitting still, staying focused, following instructions, staying organized, and completing homework.
- **Autism** – Difficulty mastering certain academic skills can stem from pervasive developmental disorders such as autism and Asperger's syndrome. Children with [autism spectrum disorders](#) may have trouble communicating, reading body language, learning basic skills, making friends, and making eye contact.

Hope for learning disabilities: The brain can change

How does understanding the brain help a learning disorder?

Using a telephone analogy, faulty wiring in the brain disrupts normal lines of communication and makes it difficult to process information easily. If service was down in a certain area of the city, the phone company might fix the problem by re-wiring the connections.

Similarly, under the right learning conditions, the brain has the ability to reorganize itself by forming new neural connections. These new connections facilitate skills like reading and writing that were difficult using the old connections.

Science has made great strides in understanding the inner workings of the brain, and one important discovery that brings new hope for learning disabilities and disorders is called *neuroplasticity*. Neuroplasticity refers to the brain's natural, lifelong ability to change.

Throughout life, the brain is able to form new connections and generate new brain cells in response to experience and learning.

This knowledge has led to groundbreaking new treatments for learning disabilities that take advantage of the brain's ability to change. Innovative programs, such as the Arrowsmith program, use strategic brain exercises to identify and strengthen weak cognitive areas. For example, for children who have difficulty distinguishing between different sounds in a word, there are new computer-based learning programs that slow down the sounds so that children can understand them and gradually increase their speed of comprehension.

These discoveries about neuroplasticity provide hope to all students with learning disorders, and further research may lead to additional new treatments that target the actual causes of learning disabilities, rather than simply offering coping strategies to compensate for weaknesses.

Diagnosis and testing for learning disabilities and disorders

As you've already learned, diagnosing a learning disability isn't always easy. Don't assume you know what your child's problem is, even if the symptoms seem clear. It's important to have your child tested and evaluated by a qualified professional.

That said, you should trust your instincts. If you think something is wrong, listen to your gut. If you feel that a teacher or doctor is minimizing your concerns, seek a second opinion. Don't let anyone tell you to "wait and see" or "don't worry about it" if you see your child struggling. Regardless of whether or not your child's problems are due to a learning disability, intervention is needed. You can't go wrong by looking into the issue and taking action.

Keep in mind that finding someone who can help may take some time and effort. Even experts mix up learning disabilities with ADHD and other behavioral problems sometimes. You may have to look around a bit or try more than one professional.

In the meantime, try to be patient, and remember that you won't always get clear answers. Try not to get too caught up in trying to determine the label for your child's disorder. Leave that to the professionals. Focus instead on steps you can take to support your child and address his or her symptoms in practical ways.

The diagnosis and testing process for learning disabilities

Diagnosing a learning disability is a process. It involves testing, history taking, and observation by a trained specialist. Finding a reputable referral is important. Start with your child's school, and if they are unable to help you, ask your insurance company, doctor, or friends and family who have dealt successfully with learning disabilities.

Types of specialists who may be able to test for and diagnose learning disabilities include:

- Clinical psychologists
- School psychologists
- Child psychiatrists

- Educational psychologists
- Developmental psychologists

- Neuropsychologist
- Psychometrist
- Occupational therapist (tests sensory disorders that can lead to learning problems)
- Speech and language therapist

Sometimes several professionals coordinate services as a team to obtain an accurate diagnosis. They may ask for input from your child's teachers. Recommendations can then be made for special education services or speech-language therapy within the school system.

A nonpublic school that specializes in treating learning disabilities might be a good alternative if the public school is not working out. For a list of nonpublic schools in your area go to the website for your state's Department of Education.

Integration, sequencing and abstraction: Technical terms for how the brain works

A professional learning disorders specialist might refer to the importance of “integration” to learning. Integration refers to the understanding of information that has been delivered to the brain, and it includes three steps: sequencing, which means putting information in the right order; abstraction, which is making sense of the information; and organization, which refers to the brain's ability to use the information to form complete thoughts.

Each of the three steps is important and your child may have a weakness in one area or another that causes learning difficulty. For example, in math, sequencing (the ability to put things in order) is important for learning to count or do multiplication (as well as learn the alphabet or the months of the year). Similarly, abstraction and organization are important parts of numerous educational skills and abilities. If a certain brain activity isn't happening correctly, it will create a roadblock to learning.

Getting help for children with learning disabilities

When it comes to learning disabilities, it's not always easy to know what to do and where to find help. Turning to specialists who can pinpoint and diagnose the problem is, of course, important. You will also want to work with your child's school to make accommodations for your child and get specialized academic help. But don't overlook your own role. You know your child better than anyone else, so take the lead in looking into your options, learning about new treatments and services, and overseeing your child's education.

- **Learn the specifics about your child's learning disability.** Read and learn about your child's type of learning disability. Find out how the disability affects the learning process and what cognitive skills are involved. It's easier to evaluate learning techniques if you understand how the learning disability affects your child.
- **Research treatments, services, and new theories.** Along with knowing about the type of learning disability your child has, educate yourself about the most effective

treatment options available. This can help you advocate for your child at school and pursue treatment at home.

- **Pursue treatment and services at home.** Even if the school doesn't have the resources to treat your child's learning disability optimally, you can pursue these options on your own at home or with a therapist or tutor.
- **Nurture your child's strengths.** Even though children with learning disabilities struggle in one area of learning, they may excel in another. Pay attention to your child's interests and passions. Helping children with learning disorders develop their passions and strengths will probably help them with the areas of difficulty as well.

Social and emotional skills: How you can help

Learning disabilities can be extremely frustrating for children. Imagine having trouble with a skill all of your friends are tackling with ease, worrying about embarrassing yourself in front of the class, or struggling to express yourself. Things can be doubly frustrating for exceptionally bright children with learning disabilities—a scenario that's not uncommon.

Kids with learning disabilities may have trouble expressing their feelings, calming themselves down, and reading nonverbal cues from others. This can lead to difficulty in the classroom and with their peers. The good news is that, as a parent, you can have a huge impact in these areas. Social and emotional skills are the most consistent indicators of success for all children—and that includes kids with learning disorders. They outweigh everything else, including academic skills, in predicting lifelong achievement and happiness.

Learning disabilities, and their accompanying academic challenges, can lead to low self-esteem, isolation, and behavior problems, but they don't have to. You can counter these things by creating a strong support system for children with learning disabilities and helping them learn to express themselves, deal with frustration, and work through challenges. By focusing on your child's growth as a person, and not just on academic achievements, you'll help him or her learn good emotional habits that set the stage for success throughout life.

Finding support while helping a child with learning disabilities

All children can be both exhilarating and exhausting, but it may seem that your child with a learning disability is especially so. You may experience some frustration trying to work with your child, and it can seem like an uphill battle when you don't have the information you need. After you learn what their specific learning disability is and how it is affecting their behavior, you will be able to start addressing the challenges in school and at home. If you can, be sure to reach out to other parents who are addressing similar challenges as they can be great sources of knowledge and emotional support.